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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,454	03/17/2004	Hajime Nishimura	16869P-108300US	5440

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EXAMINER
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BIBBINS, LATANYA

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 10/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/803,454	Applicant(s) NISHIMURA ET AL.	
	Examiner LaTanya Bibbins	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the dimension of the optical disc device in the thickness direction (claim 4) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 3 recites the limitation "the data recording speed." There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. ***Claims 1, 3, 6, and 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Shumura et al. (US Patent Number 6,738,330 B2).***

**Regarding claim 1**, an optical disc device (Figure 1) comprising: a pickup having a semiconductor laser for providing a laser beam for recording of data on an optical disc (column 4 line 28 and Figure 1 element 16); a motor coupled to rotate the optical disc (the spindle motor in column 6 line 59); a movement mechanism configured to move the pickup in a radial direction of the optical disc (the servo mechanism in column 6 line 60); a system controller (Figure 1 element 10) configured to control the pickup by supplying drive current to the semiconductor laser (column 6 lines 61 and 62) and to control rotational speed of the optical disc (column 6 line 56); and a temperature sensor (Figure 1 element 14) configured to detect temperature of an interior of the optical disc device (column 4 lines 17-22 and column 6 lines 49-52); wherein the system controller determines data recording properties of the optical disc (see the discussion of how the controller determines data recording properties or "writing conditions" such as recording time and address etc., in column 9 lines 15-18) and controls the drive current in accordance with the temperature detected by the temperature sensor (column 6 lines 55-62) and controls the rotational speed of the optical disc based on the detected temperature (the controller stops the recording, the recording speed equals zero, when the detected temperature exceeds a temperature range column 7 lines 20,21 and 25 and 26).

**Regarding claim 3**, the optical disc device wherein the system controller comprises a table for setting the data recording speed onto the optical disc, the table containing the detected temperature and the data recording properties of the disc as

parameters (see the description of the ROM table in column 4 lines 6-8 and column 7 lines 6-10).

**Regarding claim 6**, a method of data recording of an optical disc device comprising: rotating an optical disc (the spindle motor in column 6 line 59); recording data by directing a laser beam onto the optical disc (column 6 lines 61-64); detecting temperature of an interior region of the optical disc device (column 4 lines 17-22 and column 6 lines 49-52); controlling drive current to the semiconductor laser based on the detected temperature (column 6 lines 55-62); determining data recording properties of the optical disc (see the discussion of how the controller determines data recording properties or “writing conditions” such as recording time and address etc., in column 9 lines 15-18); and setting the rotational speed of the optical disc based on the detected temperature and the data recording properties of the optical disc (the controller stops the recording when the detected temperature exceeds a temperature range column 7 lines 20,21 and 25 and 26).

**Regarding claim 8**, the method of data recording of an optical disc device wherein setting of the rotational speed of the optical disc is performed prior to recording data onto the optical disc (see column 6 lines 43-64 where the recording starts, the disc begins to rotate, and then information is recorded when laser beams irradiate the surface of the disc).

**Regarding claim 9**, Shumura discloses a method of data recording of an optical disc device wherein setting of the rotational speed of the optical disc is performed after recording data onto the optical disc (see column 7 lines 20-26 where the recording

operation is stopped, the rotation speed equals zero, when the temperature exceeds a range and after recording was already performed).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 2, 5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shumura et al. (US Patent Number 6,738,330 B2), as applied to claims 1 and 6 above, and further in view of Kondo (US Patent Number 5,561,644).**

Regarding claim 2, Shumura teaches an optical disc device (Figure 1) wherein the system controller determines the data recording properties of the optical disc (see the discussion of how the controller determines data recording properties or "writing conditions" such as recording time and address etc., in column 9 lines 15-18) but fails to teach that the data recording properties are based on information recorded in an inner circumferential section of the optical disc. Kondo on the other hand teaches a an optical disc apparatus wherein the system controller determines the data recording properties of the optical disc based on information recorded in an inner circumferential section of the optical disc (see column 6 lines 64 and 65 and column 2 lines 59-62 where the system controller determines the type of disk).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system controller in the optical disc device of Shumura to include the ability to determine the data recording properties of the optical disc based on the TOC as taught by Kondo. One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings in order to quickly and easily determine data recording properties by accessing the inner portion of the disc.

**Regarding claim 5**, Shumura teaches an optical disc with data recording properties, however the data recording properties do not include either the type of the optical disc, information regarding the manufacturer of the optical disc, information regarding the laser power needed for recording, and information regarding the rotational speed of the optical disc. Kondo, on the other hand, teaches an optical disc with data recording properties which include the type of the optical disc (see column 6 lines 64 and 65 and column 2 lines 59-62 where the system controller determines the type of disk).

**Claims 7 and 10** are drawn to the method of using the corresponding apparatus claimed in claims 2 and 5 respectively. Therefore method claims 7 and 10 correspond to apparatus claims 2 and 5 and are rejected for the same reason of obviousness as used above.



**10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shumura et al. (US Patent Number 6,738,330 B2) as applied to claim 1 above, and further in view of Sugita et al. (US Patent Number 5,311,494).**

Regarding claim 4, Shumura discloses an optical disc (Figure 1) device but fails to disclose the dimensions of the optical disc device. Sugita, however, teaches an optical disk apparatus wherein the dimension of the optical disc device in the thickness direction thereof is no more than 10 mm (see column 21 line 68 and column 22 lines 1 and 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the optical disc device of Shumura to have a thickness in accordance with the optical disk apparatus of Sugita. One of ordinary skill in the art at the time the invention was made would have been motivated to combine the teachings so that "the optical disc apparatus can be used in lap-top type or notebook-type personal computers and workstations" (Sugita column 22 lines 3-5).

### **Conclusion**

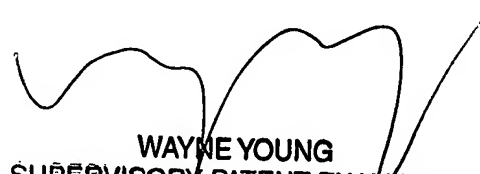
Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaTanya Bibbins whose telephone number is (571) 270-1125. The examiner can normally be reached on Monday through Friday 7:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



LaTanya Bibbins  
Patent Examiner



WAYNE YOUNG  
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